# TYPIFICATION OF TWO BUCKLEY GRASS NAMES REVISITED: MUHLENBERGIA TEXANA AND M. MONTICOLA (POACEAE)

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## INTRODUCTION

Samuel B. Buckley (1862) based new species of grass on collections he made in Texas and also specimens that had been deposited in the herbaria of the Academy of Natural Sciences of Philadelphia (PH) and Elias Durand (now P-DU). Asa Gray (1862; see also Buckley 1870) took exception to Buckley's work on grasses and wrote a scathing review, which clarified details pertinent to the typification of these names. In his review, Gray (1862) noted that he had borrowed the specimens that Buckley had used in preparing his paper and that he showed them to the agrostologist George Thurber. Details concerning Buckley's work habits and the specimens that he examined are complicated. Consequently, mistakes frequently are made in selecting lectotypes for Buckley names. Comments on the lectotypifications of two Buckley grass names are given below.

# Muhlenbergia texana Buckley

In a recent revision of the annual species of *Muhlenbergia* Schreber (Poaceae), Peterson & Annable (1991) designated *Wright 739* (US) as the lectotype of *Muhlenbergia texana* Buckley and they considered a duplicate at MO to be an isolectotype. Their choice, however, must be superseded. Fortunately, changing the lectotype does not change the application of this name.

First, there is no evidence that Buckley used *Wright 739* material in describing this species. Gray's (1862) comments indicated that this name was based on material in the Academy (PH), which presumably was collected by Buckley: "*Muhlenbergia Texana*. No specimens were communicated under this name, but one given by Mr. Buckley to the Academy's herbarium under the name of 'Agrostis barbatis,' Buckl.' may, from the description, be the plant intended. This is a form of *Sporobolus ramulosus*."

Secondly, Buckley did not have access to the Wright specimens that are now in the U.S. National Herbarium (US). The Wright material that Buckley used to describe other species of grass was in the herbarium of the Academy (PH) and possibly that of Durand (now P-DU).

Finally, Peterson & Annable (1991) mistakenly wrote *Wright* 739 for *Wright* SIDA 15(4): 589 – 591. 1993

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736. Wright 739 at GH and NY is Aristida wrightii Nash (the type is Reverchon 1061, not a Wright collection). Wright 736 at GH, NY, and US is Muhlenbergia texana Buckley.

There is original material of *Muhlenbergia texana* Buckley in the Academy (PH) that can serve as the lectotype of this name. It is part of a sheet with four specimens, one of which is labeled "*Agrostis barbatis!* Buckl." by Buckley. Gray's (1862) published comments were attached to Buckley's specimen and it was annotated by Thurber: "*Sporobolus ramulosus* Rth.! This I think is! *Muhlenbergia Texana* Buckl./G[eorge]T[hurber]." We here select the material labelled *Agrostis barbatis* by Buckley at PH as lectotype. We have seen no duplicates of this collection.

## Muhlenbergia monticola Buckley

Buckley (1862) cited no collector and gave scanty locality data ("Northwestern Texas") when he described *Muhlenbergia monticola* Buckley.

It was Gray (1862) who indicated that this name was based on *Wright 731* & 733. Clearly these Wright collections at PH (or P-DU) are syntypes and only one of them can serve as the lectotype. Annotations on the material at PH (both *Wright 731* & 733 are mounted on the same sheet) indicate that A. S. Hitchcock thought Buckley's species was based on two different elements. He annotated *Wright 731* as *M. monticola* and *Wright 733* as *M. parviglumis* Vasey. Subsequently, Hitchcock (1950), in presenting a synonymy of *M. monticola*, listed *Wright 731*, but he did not designate it the type of this name. Peterson & Annable (1991) considered *Wright 731* at US to be the holotype and *Wright 731* at MO an isotype thereby effectively lectotypifying the name. Buckley, however, did not examine either specimen. He studied *Wright 731* at the Academy (PH) or in Durand's herbarium (now P-DU). We here select the material at PH as lectotype. Consequently, duplicates of *Wright 731* at US and MO become isolectotypes. However, *M. monticola* is a synonym of *M. tenuifolia* because of earlier publication.

Shaw (1987) indicated that *Wright 731* was made up of a single field number (972) of a grass that Wright collected on hills in the "Pass of the Limpia" on August 24, 1849. There is reasonable certainty that duplicates of *Wright 731* are part of a single gathering. McVaugh (1948) determined the Pass of the Limpia to be the same as Wild Rose Pass, northeast of Fort Davis, Jeff Davis Co., Texas.

## TAXONOMIC SUMMARY

Muhlenbergia texana Buckley, Proc. Acad. Nat. Sci. Philadelphia 14: 91. 1862. Podosemum texanum (Buckley) Bush, Amer. Midl. Naturalist 7: 41. 1921. Type. [U.S.A.] Northern Texas ["Agrostis barbatis Buckl."], May, [leg. S. B. Buckley?] (Lectotype, here designated: PH!).

- Agrostis barbatis Buckley ex Gray, Proc. Acad. Nat. Sci. Philadelphia 14: 334. 1862, nom. nud., pro syn.
- = Muhlenbergia buckleyana Scribner in Coulter, Contr. U. S. Natl. Herb. 1(2): 56. 1890, nom. superfl.

# Muhlenbergia tenuifolia (H.B.K.) Kunth, Révis. Gramin. 1(4): 63. 1829.

= Muhlenbergia monticola Buckley, Proc. Acad. Nat. Sci. Philadelphia 14: 91. 1862; Gray, Proc. Acad. Nat. Sci. Philadelphia 14: 334. 1862. Type. [U.S.A. Texas. "Side of hills in the Pass of the Limpia," 24 Aug 1849], Charles Wright 731 (Lectotype, here selected: PH!; Isolectotypes: MO!, US!).

See Peterson and Annable (1991) for other synonyms.

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